



## Linear Actuators MAGFORCE

SKS ....

| Technical Data:               | Type   | SKS 15404 - 300 | SKS 20406 - 300 | SKS 25412 - 300 | SKS 30423 - 300 |
|-------------------------------|--------|-----------------|-----------------|-----------------|-----------------|
| Push force                    | kN     | 15              | 20              | 25              | 30              |
| Static load                   | kN     | 40              | 40              | 40              | 40              |
| Speed                         | mm/sec | 45              | 33              | 17              | 9               |
| Stroke length                 | mm     | 300             | 300             | 300             | 300             |
| Voltage                       | V=     | 3 x 400         | 3 x 400         | 3 x 400         | 3 x 400         |
| Power consumption             | W      | 1700            | 1650            | 1300            | 1200            |
| Current consumption           | A      | 3,3             | 3,5             | 2,8             | 3,0             |
| Duty cycle                    | %      | 10              | 10              | 10              | 10              |
| Ambient temperature           | °C     | - 10 / + 40     | - 10 / + 40     | - 10 / + 40     | - 10 / + 40     |
| Protection / insulation class |        | I/B             | I/B             | I/B             | I/B             |
| Protection class              | IP     | 54              | 54              | 54              | 54              |
| Weight                        | kg     | 30,0            | 30,0            | 30,0            | 30,0            |

### Description

MAGFORCE linear actuators type SKS are specially suitable for industrial application due to their compact and robust design. The stroke is restricted by internal mechanical stops. Limit switches are not necessary as a friction clutch prevents the motor from being stalled in the end positions. The motor, however, should be prevented from operating for long periods of time against the end stops. The duty cycle stated above relates to an ambient temperature of +40° C and an interval operating time of 10 minutes. The technical data mentioned refer to operation under nominal load. A thermal switch incorporated in the motor winding cuts off the power supply at 120° C thus protecting the motor from overheating and resets itself again after cooling. The standard stroke is 300 mm, but lengths up to 700 mm are available on request, whereby the body length is increased proportionally.

### Electrical Connection

Reversing of the motor is achieved by changing poles via push button or relay. A direct change of direction shouldn't be avoided because of the arising inertia forces. The push button or switch must return automatically to the neutral position when it is released so that the motor does not run against the end stops for longer than necessary. Alternatively external limit switches can be supplied on request which switch off the motor in the end positions.

For wiring diagram see inside terminal box. Do not connect motors in parallel. They must be connected according to a special diagram.

### Installation

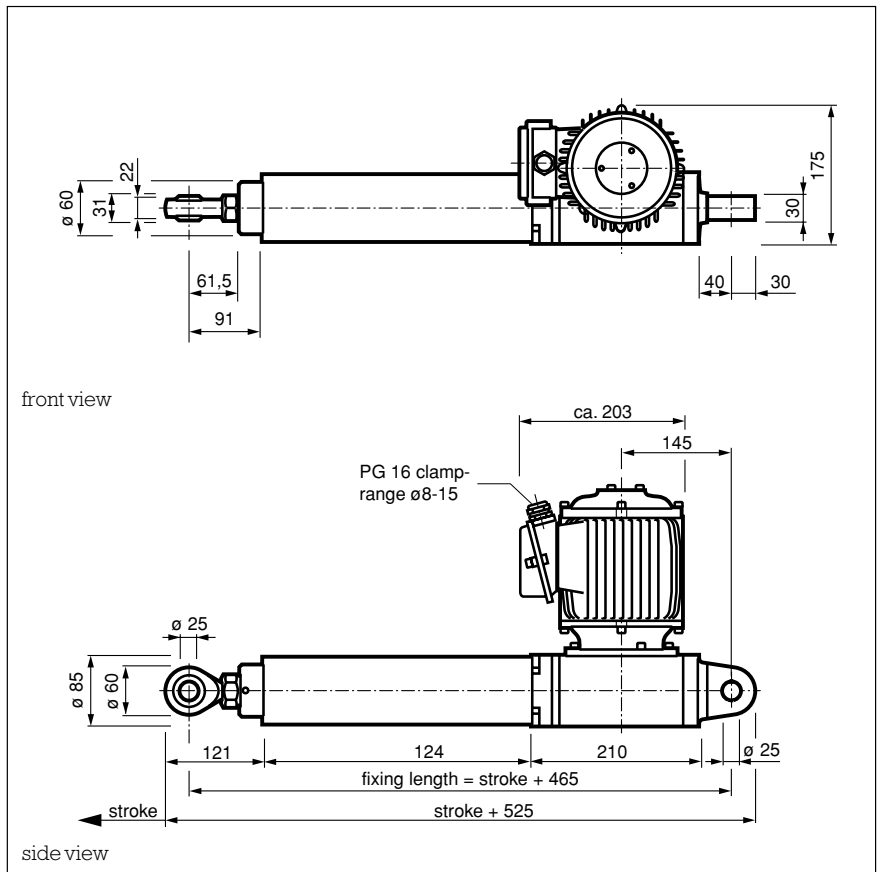
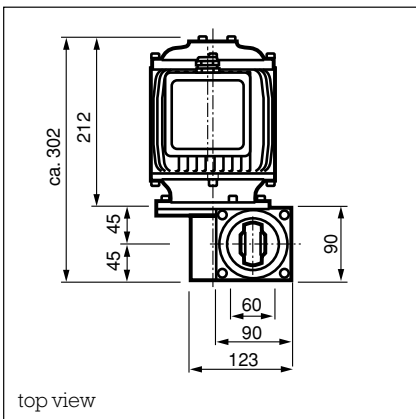
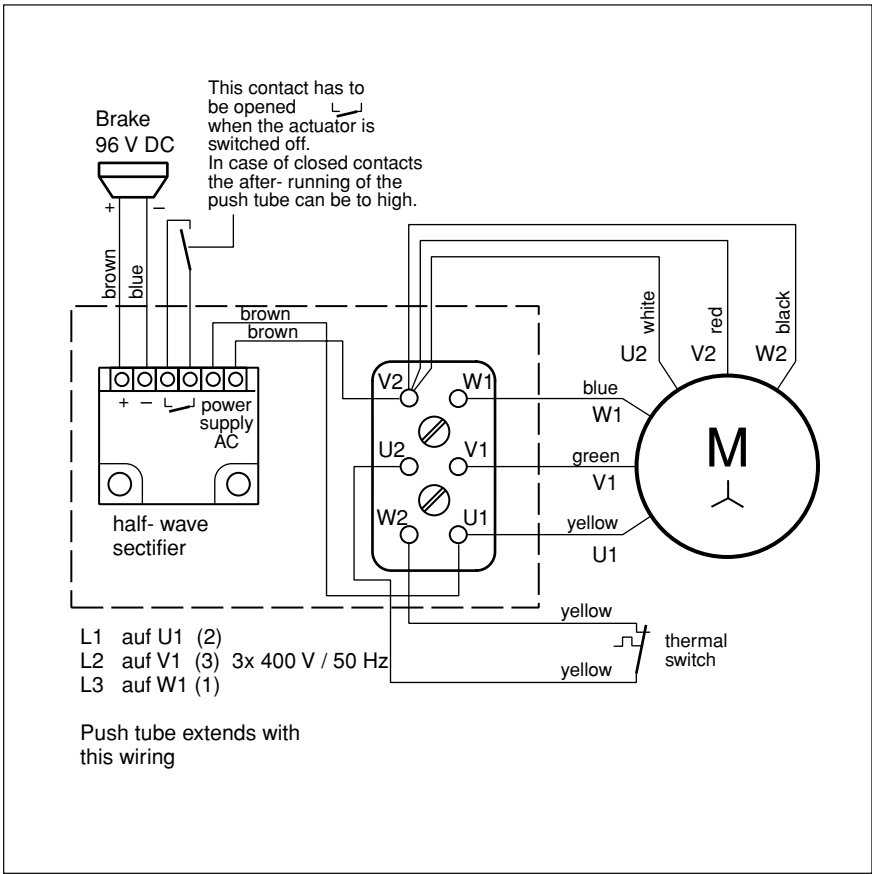
The actuator is fixed at the rear clevis and the push tube. At the push tube an adapter supplied optionally as well as the fork head can be fixed. Ensure that the push tube cannot turn, and that the load on the push tube is axial only. Side loads on the push tube must be avoided. The push tube must not be subjected to bending loads and motor and levers should be aligned. Make sure that the electric cables are not damaged by squeezing, bending or stretching. Customers must ensure that the cable gland is tight to guarantee protection class IP 54.

### Maintenance

The linear actuator has sufficient lubrication reserve and is almost maintenance-free. Only the push tube should be cleaned and lightly greased from time to time. The service life depends very much on the corresponding application (for example; temperature; conditions regarding run, force and cycles, as well as environmental influences) and must be found out in case of need. Defective motors may be repaired only in our factory for safety reasons.

### Remark

If our actuators are used for applications where persons could be directly or indirectly endangered, we have to be contacted in order to discuss safety precautions.



Subject to technical modifications.  
The manufacturer / user must check that the products of Magnetic are compatible with his application.